

Inside Wallops

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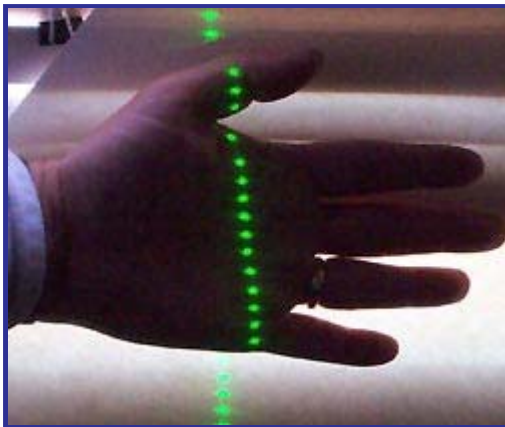
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NASA'S Science Resources Help Agencies Respond to Katrina Wallops Sends Resources to Assist

NASA science instruments and Earth-orbiting satellites are providing detailed insight about the environmental impact caused by Hurricane Katrina. Images and data are helping characterize the extent of flooding; damage to homes, businesses and infrastructure; and potential hazards caused by the storm and its aftermath.



*EAARL laser points scanned across
Wayne Wright's hand.* NASA Photo

NASA aircraft are taking high-resolution observations of the disaster area that can be used to assess the amount of damage to communities and the environment. At the request of USGS in cooperation with Federal Emergency Management Agency (FEMA) and the Army Corps of Engineers, NASA Wallops Flight Facility's (WFF) Experimental Advanced Airborne Research LIDAR (EAARL) system is surveying the gulf coastline.

The EAARL system, developed by Wayne Wright of the Hydrospheric and Biospheric Sciences Laboratory and carried on a Cessna 310, surveyed the northern gulf coastline on Thursday. Saturday the aircraft piloted by NASA WFF retiree Virgil Rabine, of Atlantic Global Research, and co-piloted by Wright flew over the perimeter and surrounding levee around New Orleans to assist in damage assessment of the system. Richard Mitchell, EG&G, also is supporting the EAARL mission.

NASA's partner agencies in this effort include the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA), the National Geospatial Intelligence Agency, the Environmental Protection Agency, and the U.S. Department of Agriculture.

While making its observations of the land, EAARL has the ability to "see" through vegetation, like trees and shrubs, to view the land underneath. Near the coast it can map the beach surface under water. This will help in the recovery of the shoreline

infrastructure; determine hazard areas and environmental loss.

The Terra, Aqua and Tropical Rainfall Measuring Mission (TRMM) satellites have already provided Earth observations. Terra's Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) is providing data on the magnitude and extent of damage and flooding to the USGS Emergency Response Team.

NASA's Moderate Resolution Imaging Spectroradiometer (MODIS) instrument on the Terra and Aqua satellites provided images of flooding, pre and post disaster comparisons. Data from NASA's QuikScat satellite was one source of wind observations used by NOAA's Hurricane Research Division to analyze the wind field of the storm and to track its path.

The Advanced Land Imagery (ALI) multispectral instrument on NASA's Earth Observing Mission 1 (EO-1) satellite provided observations useful in determining hurricane damage areas and in aiding in recovery, response and mitigation.

NASA satellites are used to improve weather predictions, to study climate and natural hazards. For satellite images visit: <http://www.nasa.gov/hurricane>

Message from the Administrator Regarding Hurricane Katrina

In the aftermath of Hurricane Katrina, we fortunately have no reports of any injuries or deaths among NASA employees, contractors or family members at our Stennis Space Center and Michoud Assembly Facility. Based on early assessments, both locations did suffer building damage, with no immediate indications of damage to flight hardware.

We also are grateful that the Stennis Space Center provided shelter to 4,000 people — NASA employees, contractors and family members and stranded local residents — as the hurricane moved through. Stennis is still being used as a shelter location and the Center's parking

lot is being used by FEMA officials as a staging area for recovery operations. Stennis and Michoud will be closed for business while recovery efforts continue.

Currently, Emergency Operations Centers at the affected Centers and Headquarters are open and will remain open during business hours as needed. As emergency crews begin the difficult work of clearing debris and restoring power and other services, we also are assessing how resources across the entire Agency can best be used to offer support to Stennis and Michoud. The Marshall Space Flight Center is already helping tremendously by

serving as a hub for off-site emergency procurement activities.

In the coming days and weeks, we want to make certain our colleagues and their families get the help they need. While there is considerable federal and state assistance on the way, NASA employees can get involved by contributing to the NASA Family Assistance Fund at <http://www.feea.org>.

The NASA Family Assistance Fund will provide a grant of up to \$400 and an interest free loan of up to \$600 for people living in declared disaster areas.

Wallops Shorts.....

In the News

Eastern Shore News

"NASA Changes Name of Balloon Facility to Honor Columbia"

Letters of Thanks

"Thanks the NSBF (National Scientific Balloon Facility) team in Ft. Sumner for their tremendous efforts to make this flight a success.

Mark Cobble and Victor Davison showed their superb skills in managing the launch team through a flawless launch, and Drew Denney and Robert Salter managed the complex mini-SIP and CIP operations with great skill. Derek Dobe led the recovery team to retrieve the entire payload in amazing time. Bill Stepp managed the whole operation with his usual insight, humor, and excellent judgment.

The NSBF, New Mexico State University's Physical Science Laboratory, and Wallops personnel who supported ANITA all performed with a degree of professionalism that is a great credit to

NASA and helps to make scientific ballooning one of the jewels of the NASA space science program.

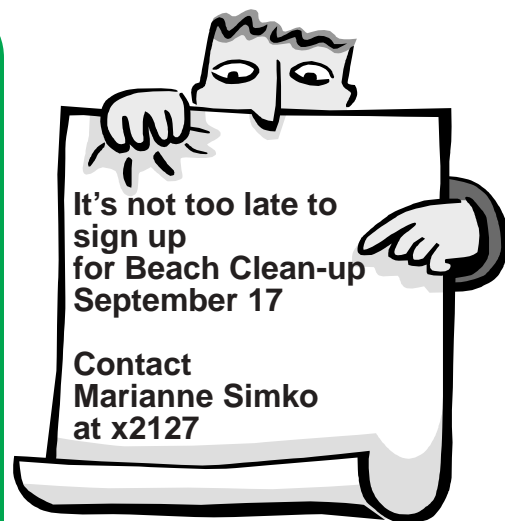
Thanks again from the whole ANITA team!"

Dr. Pete Gorham
Principal Investigator
University of Hawaii

"All of the people that I met with said that my participation in the SERI program really stood out on my resume and I wanted to thank you for giving me the opportunity. I will be working on a new air traffic control system that uses GPS instead of radar stations and I am very excited about the position.

Thank you again for all of your help last year, I thoroughly enjoyed the experience."

Joseph Norman
Salisbury University
04/05 SERI Team



NASA Wallops Flight Facility 1945 - 2005

From 1945 – 1957

Wallops was the Pilotless Aircraft Research Station under the National Advisory Committee for Aeronautics.

During this time, Wallops was instrumental in providing the foundation for aerodynamic and heat transfer research through establishing a high speed aeronautical launch site on Wallops Island that used rockets to propel aircraft models.

This facility helped researchers overcome the limited capabilities offered by the wind tunnels of the day.

Open House is October 1.

August was Warm, Wet and Muggy

by Bob Steiner, Meteorologist

Hot, humid weather was the norm for August in the Wallops area. We experienced 21 days and 24 nights with above normal temperatures and for an average monthly temperature of 78.7 degrees. This is 3.6 degrees above normal. We endured 7 days with highs of 90 degrees or greater.

The hottest day during August was on the 15th when the mercury climbed to 93 degrees. August 25 and 26 gave us our coolest readings with 63 degrees being recorded on both mornings. No record temperatures were set or tied during the month.

With measurable rain falling on only 8 days, norm is 10 days, we still received 4.47 inches of rain. This is 0.57 inches above normal. We had three days with heavy rainfall of one inch or greater. The wettest day was the August 19 when 1.52 inches of rainfall was recorded.

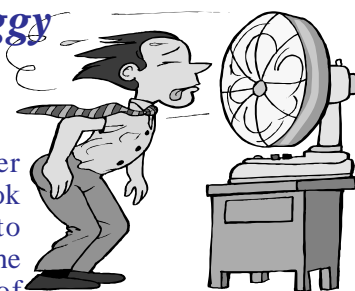
Light winds prevailed through the month until the 31st when winds of 30 mph or greater, with a maximum gust of 32 mph at 2:17 p.m., were recorded.

Summer is almost over and we look forward to fall. With the coming of October we will see the leaves change color and temperatures cool.

Average daily highs are in the low 70's at the beginning of October, falling into the mid 60's at the end of the month. Overnight lows of 55 are normal for the first of the month and decrease to near 45 by the October 31.

The record high for October is 90 degrees and occurred on October 3 and 5, 2002. The all time low for October is the 26 degree reading on the morning of the 28th in 1976.

October is the third driest month on average with measurable rain falling on 8 days, averaging 2.88 inches. The wettest October on record was in 1971 when 8.03 inches were recorded. October also is the driest month on record. In 2000 only 0.01 inches were recorded.



Pocomoke, MD: 4 bedrooms, 2.5 baths, 2 car garage, appliances included, No pets, Available October 1, 2005 Rent \$800/month, Security deposit \$800. Ralph Welsh rwelsh1@comcast.net or call 301-464-9596

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

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